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Substitute	for form 1449/PTO	-		Complete if Known				
				Application Number	09/076,404			
INFO	RMATION	DIS	CLOSURE	Filing Date	05/12/1998			
STAT	TEMENT B	ΥΑ	PPLICANT	First Named Inventor	David J. Ecker			
				Art Unit	1631			
	(Use as many she	ets as	necessary)	Examiner Name	John S. Brusca			
Sheet	1	of	4	Attorney Docket Number	IBIS-0007US			

			U.S. PATENT D	OCUMENTS	
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant
Initials N	No.1	Number - Kind Code ² (if known)	MM-DD-YYYY		Passages or Retevant Figures Appear
/JSB/	GY	US-6,221,587	04-24-2001	Ecker et al.	
/JSB/	GZ	US-6,253,168	06-26-2001	Griffey et al.	
-/JSB/	HA	US-6,280,932	08-28-2001	Parma et al.	
/JSB/	HB.	US-6,428,956	08-06-2002	Crooke et al.	
/JSB/	HC	US-6,446,032	09-03-2002	Schimmel	
/JSB/	HD	US-09/076,214	05-12-1998	Griffey et al.	
	нс	US 00 076,447	-05-12-1998	Griffey et al.	
		US- Appli	cation No.	09/076447 not	
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	FOREIGN PATENT DOCUMENTS						
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Examiner Cite Initials* No.	Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Date MM-DD-YYYY	Applicant of Cited Document	31160			
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	DALATION	LDIC	CI OCUPE	Application Number	09/076,404
INFORMATION DISCLOSURE				Filing Date	05/12/1998
STA	TEMENT E	BY A	PPLICANT	First Named Inventor	David J. Ecker
				Art Unit	1631
	(Use as many sheets as necessary)			Examiner Name	John S. Brusca
Sheet	2	of	4	Attorney Docket Number	IBIS-0007US

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Т²
/JSB/	HF	ABOUL-ELA, F. et al., "The Structure of the Human Immunodeficiency Virus Type-1 TAR RNA Reveals Principles of RNA Recognition by Tat Protein," J. Mol. Biol. (1995) 253:313-332.	
/JSB/	HG	AN, H. et al., "New Piperazinyl Polyazacylclophane Scaffolds, Libraries and Biological Activities," <i>Bioorg. Med. Chem. Lett.</i> (1998) 8:2345-2350.	
/JSB/	нн	BIEMANN, K., "Mass Spectrometry of Peptides and Proteins," Annu. Rev. Biochem. (1992) 61:977-1010.	
/JSB/	ні	BOWERS, M. T. et al., "Mass Spectrometry: Recent Advances and Future Directions," J. Phys. Chem. (1996) 100:12897-12910.	
/JSB/	НЈ	BRYAN, L. E., "Mechanisms of Action of Aminoglycoside Antibiotics," <i>New Dimension in Antimicrobial Therapy</i> (1984) Root, R. K. and Sande, M. A. (eds.), Churchill Livingstone, New York, pp. 17-36.	
/JSB/	нк	BURLINGAME, A. L., "Mass Spectrometry," Anal. Chem. (1998) 70:647R-716R.	
/JSB/	HL	CASEY, J. L. et al., "Iron-Responsive Elements: Regulatory RNA Sequences that Control mRNA Levels and Translation," <i>Science</i> (1988) 240:924-928.	
/JSB/	НМ	CHENG, X. et al., "Direct measurement of oligonucleotide binding stoichiometry of gene V protein by mass spectrometry," <i>Proc. Natl. Acad. Sci. USA</i> (1996) 93:7022-7027.	
/JSB/	HN	CRAIN, P. F. et al., "Applications of mass spectrometry to the characterization of oligonucleotides and nucleic acids," <i>Curr. Opin. Biotech.</i> (1998) 9:25-34.	
/JSB/	НО	DE STASIO, E. A. et al., "Mutations in 16S ribosomal RNA disrupt antibiotic -RNA interactions," EMBO J. (1989) 8(4):1213-1216.	
/JSB/	НР	DURET, L. et al., "HOVERGEN: a database of homologous vertebrate genes," <i>Nucleic Acids Res.</i> (1994) 22(12):2360-2365.	
· /JSB/	HQ	FITZGERALD, M. C. et al., "Probing the oligomeric structure of an enzyme by electrospray ionization time-of-flight mass spectrometry," <i>Proc. Natl. Acad. Sci. USA</i> (1996) 93:6851-6856.	
/JSB/	HR	FOURMY, D. et al., "Structure of the A Site of Escherichia coli 16S Ribosomal RNA Complexed with an Aminoglycoside Antibiotic," Science (1996) 274:1367-1371.	

A copy of this reference will not be forwarded to the U.S. Patent and Trademark Office since it is too voluminous and easily obtainable by the Examiner.

Examiner	Date]
Signature	Considered	

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1815/		ı Dic	CL OCUPE	Application Number	09/076,404	
••••			CLOSURE	Filing Date	05/12/1998	
STA	TEMENT E	BY A	PPLICANT	First Named Inventor	David J. Ecker	-
				Art Unit	1631	
	(Use as many si	heets as	necessary)	Examiner Name	John S. Brusca	
Sheet	3	of	4	Attorney Docket Number	IBIS-0007US	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
/JSB/	нѕ	FOURMY, D. et al., "Paromomycin Binding Induces a Local Conformational Change in the Asite of 16 S rRNA," J. Mol. Biol. (1998) 277:333-345.	
/JSB/	НТ	GALE, D. C. et al., "Characterization of Noncovalent Complexes Formed between Minor Groove Binding Molecules and Duplex DNA by Electrospray Ionization-Mass Spectrometry," J. Am. Soc. Mass Spectrom. (1995) 6:1154-1164.	
/JSB/	HU	GANGULY, A. K. et al., "Studies of the Ras-GDP and Ras-GTP Noncovalent Complexes by Electrospray Mass Spectrometry," <i>Tetrahedron</i> (1993) 49(36):7985-7996.	
/JSB/	HV	GRIFFEY, R. H. et al., "Detection of base pair mismatches in duplex DNA and RNA oligonucleotides using electrospray mass spectrometry," SPIE (1997) 2985:82-86.	
/JSB/	HW	HALL, K. B., "Interaction of RNA Hairpins with the Human U1A N-Terminal RNA Binding Domain," <i>Biochemistry</i> (1994) 33(33):10076-10088.	
/JSB/	нх	JORGENSEN, T. J. D. et al., "Direct Determination of Solution Binding Constants for Noncovalent Complexes between Bacterial Cell Wall Peptide Analogues and Vancomycin Group Antibiotics by Electrospray Ionization Mass Spectrometry," Anal. Chem. (1998) 70:4427-4432.	
/JSB/	НҮ	KUNTZ, I. D., "Structure-Based Strategies for Drug Design and Discovery," Science (1992) 257:1078-1082.	
/JSB/	HZ	LOO, J. A., "Studying Noncovalent Protein Complexes by Electrospray Ionization Mass Spectrometry," Mass Spectrom. Rev. (1997) 16:1-23.	
/JSB/	IA	MARSHALL, A. G. et al., "Fourier Transform Ion Cyclotron Resonance Mass Spectrometry: A Primer," Mass Spectrom. Rev. (1998) 17:1-35.	
/JSB/	IB [']	MARTIN, F. et al., "The gene for histone RNA hairpin binding protein is located on human chromosome 4 and encodes a novel type of RNA binding protein," <i>EMBO J.</i> (1997) 16(4):769-778.	
/JSB/	IC	MCMARTIN, C. et al., "QXP: Powerful, rapid computer algorithms for structure-based drug design," J. ComputAided Mol. Design (1997) 11:333-344.	
/JSB/	ID	MIYAGUCHI, H. et al., "An antibiotic-binding motif of an RNA fragment derived from the Asite-related region of <i>Escherichia coli</i> 16S rRNA," <i>Nucleic Acids Res.</i> (1996) 24(19):3700-3706.	

	 	
Examiner	Date	
Signature	Considered	

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Substitute for form 1449/PTO Complete if Known Application Number 09/076,404 INFORMATION DISCLOSURE 05/12/1998 Filing Date STATEMENT BY APPLICANT First Named Inventor David J. Ecker Art Unit 1631 (Use as many sheets as necessary) Examiner Name John S. Brusca Attorney Docket Number **IBIS-0007US** Sheet of 4

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Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
/JSB/	IE	OWEN, D. et al., "Noncoding 3' sequences of the transferrin receptor gene are required for mRNA regulation by iron," <i>EMBO J.</i> (1987) 6(5):1287-1293.	
/JSB/	IF	RECHT, M. I. et al., "RNA Sequence Determinants for Aminoglycoside Binding to an A-site rRNA Model Oligonucleotide," J. Mol. Biol. (1996) 262:421-436.	
/JSB/	IG	SMITH, R. D. et al., "New mass spectrometric methods for the study of noncovalent associations of biopolymers," <i>Chem. Soc. Rev.</i> (1997) 26:191-202.	
/JSB/	IH	SON, SY., "The Structure and Regulation of Histone Genes," Saengwhahak nyusu (1993) 13(2):64-70.	
/JSB/	II	WANG, Y. et al., "Specificity of Aminoglycoside Binding to RNA Constructs Derived from the 16S rRNA Decoding Region and the HIV-RRE Activator Region," <i>Biochemistry</i> (1997) 36(4):768-779.	
/JSB/	IJ	WINCOTT, F. et al., "Synthesis, deprotection, analysis and purification of RNA and ribozymes," <i>Nucleic Acids Res.</i> (1995) 23(14):2677-2684.	
/JSB/	IK	WONG, CH. et al., "Specificity of aminoglycoside antibiotics for the A-site of the decoding region of ribosomal RNA," <i>Chem. Biol.</i> (1998) 5:397-406.	
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Examiner Signature	/John S. Brusca/	Date Considered	01/29/2008
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